

REMARKS

This responds to the Office Action dated 15 September 2010. Independent claim 33 is amended to correct a formality issue. The amendment is supported by at least FIGS. 5A-D and the description at pages 6-7 of the present application. No new matter has been added.

Interview Summary

On 16 December 2010, the undersigned attorney engaged in an in-person interview with Supervisory Patent Examiner Jackie Ho. We discussed all claims pending in the application along with the prior art of record. Examiner Ho agreed that the present disclosure supports the “cantilevered” claim limitation and that the prior art does not teach or suggest this limitation. Therefore, an agreement was reached that the claims distinguish the invention over the prior art of record.

Claim Rejections – 35 U.S.C. § 112

Claims 1, 3, 6-17, 21-29, 33-36, 38-46, 49-51, 53-55 and 59 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement related to the claimed “cantilevered” locking post(s). Applicants respectfully traverse this rejection.

The Examiner correctly notes that FIGS. 5A-5D show each locking post 508 having a free end. Applicant submits that FIGS. 5A-5D also show each of the locking posts 508 being connected to the housing 504. A comparison of FIGS. 5A and 5B show that the locking posts 508 rotate with the housing 504 to change a path traveled by the suture 506. If the locking posts 508 were not connected to the housing 504, the locking posts 508 would maintain the same position when the housing 504 is rotated.

Furthermore, it is well known that the term “cantilevered” describes an object that has a free end and an opposite fixed end. The locking posts 508 shown in FIGS. 5A-5D have a free end and are connected at an opposite to the housing 504. Therefore, the figures and description of the present application provide proper support under 35 U.S.C. § 112, first paragraph, for the term “cantilevered” as it relates to the locking posts.

Claim Rejections – 35 U.S.C. § 103

Claims 1, 3, 6-17, 21-29, 33-36, 38-46, 49-51, 53-55 and 59 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,681,334 to Evans et al. in view of U.S. Patent No. 5,662,681 to Nash et al., U.S. Patent No. 6,475,230 to Bonutti et al., and U.S. Published Application No. 2004/0147958 to Lam et al. Applicant respectfully traverses this rejection.

Independent claims 1, 21, 33, 38, 43, 50 and 55 recite either “a housing and at least first and second cantilevered locking posts extending from the housing,” or “a housing and at least two cantilevered locking posts extending from the housing.” Claims 1, 21, 33, 38, 43, 50 and 55 also recite the “suture locking mechanism being rotatable between a non-locked position and a locked position” (claim 1), “the locking device being rotatable between a first orientation and a second orientation” (claim 21), “the suture locking assembly being rotatable between unlocked and locked positions” (claim 33), “the locking element being rotatable between a first orientation and a second orientation” (claim 38), “the locking element being rotatable between a first orientation and a second orientation” (claim 43), or “the inner housing assembly being rotatable between a first position and a second position” (claims 50 and 55).

Evans is directed to an apparatus 20 used to apply a collagen 22 to inhibit the flow of blood through a percutaneous puncture 10. The apparatus includes a suture 24A-C, a washer or disk 46/50, a housing 26, and a tamping member 28 for placement of the collagen 22 at the puncture 10. The collagen 22 is expelled from the housing 26 with the tamping member 28 at the puncture 10. The collagen 22 may be held in place at the puncture 10 with the disk 46, wherein the sutures 24A, 24B are frictionally held in a passageway 48 of the disk 46. Evans fails to disclose or suggest a rotatable suture locking mechanism that includes a housing and locking posts. Evans also fails to disclose or suggest “cantilevered locking posts” as recited in claims 1, 21, 33, 38, 43, 50 and 55.

Nash discloses additional features of a closure device such as an anchor 32. However, Nash also fails to disclose or suggest a rotatable suture locking mechanism that includes a housing and locking posts. Nash further fails to disclose or suggest “cantilevered locking posts” as recited in claims 1, 21, 33, 38, 43, 50 and 55.

Bonutti discloses with reference to FIG. 29 a suture retainer 622 that includes a conical body 624 that is positioned in a cylindrical sleeve or base 626. Bonutti, like Evans and Nash, fails to disclose or suggest a rotatable suture locking mechanism that includes a housing and locking posts. Bonutti also fails to disclose or suggest “cantilevered locking posts” as recited in claims 1, 21, 33, 38, 43, 50 and 55.

Lam discloses with reference to FIG. 12 a locking device that includes a pair of rods 106a, 106b about which a suture 39 is wound. The rods 106a, 106b are positioned within a cylinder 103 and are attached at opposing ends “to the first and second ends of cylinder 103 by pins 107, which pass through pivot holes 108” (*see* paragraph [0089] of Lam). The rods 106a,

106b are rotatable about the pivot holes 108. Both ends of each of the rods 106a, 106b are connected with the pins 107 to the cylinder 103 so that each end is fixed. Contrary to the Examiner assertion that a rotatable connection at one end of the rods 106a, 106b provides a cantilevered construction, no end of either of the rods 106a, 106b is free and neither of the rods 106a, 106b is a cantilevered structure. While the rods 106a, 106b are rotatable connected to ends of the cylinder 103, each end of the rods 106a, 106b clearly is connected to the cylinder 103. The rods 106a, 106b do not have free ends and therefore do not meet the definition of a cantilevered structure.

Therefore, Applicant submits that Lam fails to disclose or suggest “a housing and at least first and second cantilevered locking posts extending from the housing,” or “a housing and at least two cantilevered locking posts extending from the housing,” as required by claims 1, 21, 33, 38, 43, 50 and 55.

In view of the above, Applicant submits that Evans, Nash, Bonutti and Lam, alone or in combination, fail to disclose or render obvious every limitation of claims 1, 21, 33, 38, 43, 50 and 55, and the claims that depend from them.

Conclusion

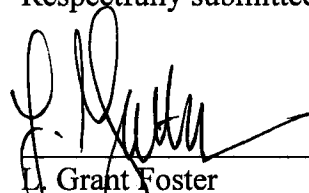
For at least the foregoing reasons, Applicant believes that each of the presently pending claims in this application is in immediate condition for allowance. Accordingly, Applicant respectfully requests a favorable action on the merits. If the Examiner has any further comments or suggestions, Applicant invites the Examiner to telephone the undersigned attorney to expedite the handling of this matter.

Applicant expressly disclaims all arguments, representations, and/or amendments presented or contained in any other patent or patent application, including any patents or patent applications claimed for priority purposes by the present application or any patents or patent applications that claim priority to this patent application. Moreover, all arguments, representations, and/or amendments presented or contained in the present patent application are only applicable to the present patent application and should not be considered when evaluating any other patent or patent application.

The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account No. 08-2623.

Respectfully submitted,

Dated: 14 JANUARY 2011



D. Grant Foster
Registration No. 33,236